Abstract of the disclosure

A surface irrigation apparatus and method, wherein water/nutrients are supplied to the surface irrigation apparatus through a water/nutrients supply conduit and distributed through a plurality of water/nutrient distribution conduits. Each water/nutrients distribution conduit includes a plurality of spaced "injection nozzles" through which water/nutrients are injected directly downward into the soil root zone of the plants, trees, or shrubs being cultivated. A valve and a controller to control the valve are also included. A moisture sensor can also be used to sense the moisture level in the soil to activate the controller.